

3.3 Weights for Years 2-9

As it is impossible to decompose the various components of the baseline final weights provided by RTI into the various components that correspond to sampling probability, non-response, and post-stratification based on primary sampling units, we treat the baseline final weights provided by RTI as the base weights in weighting the data for Years 2-9. Let w_{Bi} denote the base weight for individual i .

To create non-response weights for Years 2-9, we derive response propensity scores based on respondent gender, race, age, and marital status. These demographic variables were selected for inclusion in the logistic non-response regression because they are systematically related to attrition in the survey, as indicated in section 2.4. The non-response weight for each individual is the inverse of his estimated response propensity. Let w_{NRij} denote the non-response weight for individual i in survey year(s) j .

To create post-stratification weights, we use weight classes to adjust the weighted population totals so that they are comparable to the weighted baseline renters sample with respect to race and relative income. Let w_{PSij} denote the post-stratification adjustment for individual i in year(s) j .

The final weight w_{ij} for each individual i in a given survey year or years j following baseline is then defined as

$$w_{ij} = w_{Bi} * w_{NRij} * w_{PSij}$$